

ABSTRACT OF THE DISCLOSURE

5 A biodegradable polymer ("biopolymer) filled with more than 5 wt%, and up to
about 35 wt% of an inert particulate filler so as to have a WVTR in the range from at
least twice to about 50 times greater than that of low density PE having a melt flow
index of 1 g/10 min, each of the same thickness, is more effective to protect metal parts
against corrosion than "neat" or unfilled biopolymer. Moreover a cross-section of the
filled biopolymer 0.025 mm thick, is substantially transparent if the neat biopolymer is
10 transparent. The improvement in corrosion protection is obtained without decreasing
the tensile strength of the film below a critical tensile strength of 2000 psi in either the
machine or transverse direction, preferably in both directions, due to the uniformity of
the dispersed particles in the filled biopolymer. Such uniformity is obtained because
the ingredients in the biopolymer are essentially anhydrous.

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